§21.19

shows at the time of application that his product requires a longer period of time for design, development, and testing, and the Administrator approves a longer period.

(d) In a case where a type certificate has not been issued, or it is clear that a type certificate will not be issued, within the time limit established under paragraph (c) of this section, the applicant may—

(1) File a new application for a type certificate and comply with all the provisions of paragraph (a) of this section applicable to an original application; or

(2) File for an extension of the original application and comply with the applicable airworthiness requirements of this subchapter that were effective on a date, to be selected by the applicant, not earlier than the date which precedes the date of issue of the type certificate by the time limit established under paragraph (c) of this section for the original application.

(e) If an applicant elects to comply with an amendment to this subchapter that is effective after the filing of the application for a type certificate, he must also comply with any other amendment that the Administrator finds is directly related.

(f) For primary category aircraft, the requirements are:

(1) The applicable airworthiness requirements contained in parts 23, 27, 31, 33, and 35 of this subchapter, or such other airworthiness criteria as the Administrator may find appropriate and applicable to the specific design and intended use and provide a level of safety acceptable to the Administrator.

(2) The noise standards of part 36 applicable to primary category aircraft.

[Doc. No. 5085, 29 FR 14564, Oct. 24, 1964, as amended by Amdt. 21–19, 32 FR 17851, Dec. 13, 1967; Amdt. 21–24, 34 FR 364, Jan. 10, 1969; Amdt. 21–42, 40 FR 1033, Jan. 6, 1975; Amdt. 21–58, 50 FR 46877, Nov. 13, 1985; Amdt. 21–60, 52 FR 8042, Mar. 13, 1987; Amdt. 21–68, 55 FR 32860, Aug. 10, 1990; Amdt. 21–69, 56 FR 41051, Aug. 16, 1991; Amdt. 21–70, 57 FR 41367, Sept. 9, 1992]

§21.19 Changes requiring a new type certificate.

Any person who proposes to change a product must make a new application for a type certificate if—

- (a) The Administrator finds that the proposed change in design, configuration, power, power limitations (engines), speed limitations (engines), or weight is so extensive that a substantially complete investigation of compliance with the applicable regulations is required;
- (b) In the case of a normal, utility, acrobatic, commuter or transport category aircraft, the proposed change is—
- (1) In the number of engines or rotors; or
- (2) To engines or rotors using different principles of propulsion or to rotors using different principles of operation:
- (c) In the case of an aircraft engine, the proposed change is in the principle of operation; or
- (d) In the case of propellers, the proposed change is in the number of blades or principle of pitch change operation.

[Doc. No. 5085, 29 FR 14564, Oct. 24, 1964, as amended by Amdt. 21-59, 52 FR 1835, Jan. 15, 1987]

§21.21 Issue of type certificate: normal, utility, acrobatic, commuter, and transport category aircraft; manned free balloons; special classes of aircraft; aircraft engines; propellers.

An applicant is entitled to a type certificate for an aircraft in the normal, utility, acrobatic, commuter, or transport category, or for a manned free balloon, special class of aircraft, or an aircraft engine or propeller, if—

- (a) The product qualifies under $\S 21.27$; or
- (b) The applicant submits the type design, test reports, and computations necessary to show that the product to be certificated meets the applicable airworthiness, aircraft noise, fuel venting, and exhaust emission requirements of the Federal Aviation Regulations and any special conditions prescribed by the Administrator, and the Administrator finds—
- (1) Upon examination of the type design, and after completing all tests and inspections, that the type design and the product meet the applicable noise, fuel venting, and emissions requirements of the Federal Aviation Regulations, and further finds that they meet

the applicable airworthiness requirements of the Federal Aviation Regulations or that any airworthiness provisions not complied with are compensated for by factors that provide an equivalent level of safety; and

(2) For an aircraft, that no feature or characteristic makes it unsafe for the category in which certification is requested.

[Doc. No. 5085, 29 FR 14564, Oct. 24, 1964, as amended by Amdt. 21–15, 32 FR 3735, Mar. 4, 1967; Amdt. 21–27, 34 FR 18368, Nov. 18, 1969; Amdt. 21–60, 52 FR 8042, Mar. 13, 1987; Amdt. 21–68, 55 FR 32860, Aug. 10, 1990]

§21.23 [Reserved]

§ 21.24 Issuance of type certificate: primary category aircraft.

- (a) The applicant is entitled to a type certificate for an aircraft in the primary category if—
 - (1) The aircraft—
- (i) Is unpowered; is an airplane powered by a single, naturally aspirated engine with a 61-knot or less V_{so} stall speed as defined in §23.49; or is a rotorcraft with a 6-pound per square foot main rotor disc loading limitation, under sea level standard day conditions:
- (ii) Weighs not more than 2,700 pounds; or, for seaplanes, not more than 3,375 pounds;
- (iii) Has a maximum seating capacity of not more than four persons, including the pilot; and
 - (iv) Has an unpressurized cabin.
 - (2) The applicant has submitted-
- (i) Except as provided by paragraph (c) of this section, a statement, in a form and manner acceptable to the Administrator, certifying that: the applicant has completed the engineering analysis necessary to demonstrate compliance with the applicable airworthiness requirements; the applicant has conducted appropriate flight, structural, propulsion, and systems tests necessary to show that the aircraft, its components, and its equipment are reliable and function properly; the type design complies with the airworthiness standards and noise requirements established for the aircraft under §21.17(f); and no feature or characteristic makes it unsafe for its intended use:

- (ii) The flight manual required by §21.5(b), including any information required to be furnished by the applicable airworthiness standards;
- (iii) Instructions for continued airworthiness in accordance with $\S21.50(b)$; and
- (iv) A report that: summarizes how compliance with each provision of the type certification basis was determined; lists the specific documents in which the type certification data information is provided; lists all necessary drawings and documents used to define the type design; and lists all the engineering reports on tests and computations that the applicant must retain and make available under §21.49 to substantiate compliance with the applicable airworthiness standards.
 - (3) The Administrator finds that—
- (i) The aircraft complies with those applicable airworthiness requirements approved under §21.17(f) of this part; and
- (ii) The aircraft has no feature or characteristic that makes it unsafe for its intended use.
- (b) An applicant may include a special inspection and preventive maintenance program as part of the aircraft's type design or supplemental type design.
- (c) For aircraft manufactured outside of the United States in a country with which the United States has a bilateral airworthiness agreement for the acceptance of these aircraft, and from which the aircraft is to be imported into the United States—
- (1) The statement required by paragraph (a)(2)(i) of this section must be made by the civil airworthiness authority of the exporting country; and
- (2) The required manuals, placards, listings, instrument markings, and documents required by paragraphs (a) and (b) of this section must be submitted in English.

[Doc. No. 23345, 57 FR 41367, Sept. 9, 1992; as amended by Amdt. 21–75, 62 FR 62808, Nov. 25, 1997]

§ 21.25 Issue of type certificate: Restricted category aircraft.

(a) An applicant is entitled to a type certificate for an aircraft in the restricted category for special purpose operations if he shows compliance with